

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Homeshield Fabricated Products

#### Illinois Manufacturing Extension Center

#### Process Improvements At Homeshield Open A Window Of Opportunity

##### Client Profile:

Homeshield is a manufacturer of residential building products such as soffit, downspout, guttering, and rainware, and engineered products such as cladding, screen frame, glass frame, insulated glass spacer, and muntin for window and door manufacturers. The Chatsworth, Illinois-based company is a division of Houston-based Quanex, and employs less than 250 people.

##### Situation:

Homeshield was preparing to secure a new piece of business in the furniture industry, but needed to make more shop floor space available to accommodate the new operations. The company would also have to purchase a large piece of machinery and integrate it into existing space. As Homeshield analyzed the plant in hopes of finding more space, the company discovered that by eliminating inefficiencies on the window screen line, it could reclaim the space needed for its new product line. The company called on the Illinois Manufacturing Extension Center (IMEC), a NIST MEP network affiliate, for help.

##### Solution:

IMEC lean specialists facilitated a kaizen blitz in which IMEC and Homeshield personnel literally broke down all aspects of the screen production process to look for improvement opportunities. It quickly became apparent that inventory overstock, poor material handling, and long product travel distances were at the root of Homeshield's poor screen production output.

Using a hybrid of cellular and horseshoe design, IMEC specialists mapped out a path to improve material flow and reduce wasted motion and operator handling. Point-of-use storage put screen cloth and corner locks at the operator's fingertips. The change dramatically reduced the amount of physical feet that an operator walked on the line.

By building to order, the company immediately realized a 40 percent improvement in the number of screens being manufactured per hour. By reducing damage caused by extensive operator handling, product quality improved. Best of all, Homeshield reclaimed the floor space needed to bring in the furniture product line, improving sales by 6 percent for 2003 with potentially more sales to follow.

Building on the success of the screen improvement project, IMEC coordinated six other lean implementations for other Homeshield product lines and administrative processes. The company anticipates \$2.2 million in sales and

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cost saving benefits as a result.

### **Results:**

Increased product output by 40 percent.

Improved product quality.

Grew current year sales by 6 percent.

Anticipating \$2.2 million in revenue and cost savings in the coming year.

### **Testimonial:**

"This project was a model of lean in action. Because of the Illinois Manufacturing Extension Center's assistance, our operators are now routinely looking for opportunities to streamline a process and reduce waste."

Sam Lewis, General Manager